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RESPONSE UNDER 37 C.F.R. § 1.116  
EXPEDITED PROCEDURE  
GROUP 2827  
PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No. Q60202

Christian RUQUE

Appln. No. 09/628,442

Group Art Unit: 2827

Confirmation No. 3334

Examiner: DINH, T.

Filed: July 28, 2000

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For: A DEVICE FOR PROTECTING A DRAWER ELECTROMAGNETICALLY

**RESPONSE UNDER 37 C.F.R. § 1.116**

ATTN: BOX AF  
Commissioner for Patents  
Washington, D.C. 20231

Sir:

The following remarks are submitted in response to the Office Action dated August 27, 2002.

**REMARKS**

**I. Introduction**

Claims 1-11 were examined. The Examiner rejected claims 1-10 (sic: 1-11) under 35 U.S.C. § 112, second paragraph. The Examiner rejected claim 1 under 35 U.S.C. § 102(b), as allegedly being anticipated by Aziz et al., U.S. Patent No. 5,949,645 (hereinafter "Aziz"). The Examiner rejected claims 2-3 and 9 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Aziz in view of Anderson et al., U.S. Patent No. 6,209,842 (hereinafter "Anderson"). The

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Examiner rejected claims 4-8 and 11 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Aziz in view of Porter, U.S. Patent No. 5,808,866 (hereinafter "Porter"). Furthermore, the Examiner objected to claim 10, but acknowledged that it contains allowable subject matter.

## **II. Rejections under 35 U.S.C. § 112, Second Paragraph**

Claims 1-11 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner appears uncertain of what is meant by the recitation "said faces being electrically conductive," as recited in claim 1. Additionally, the Examiner appears uncertain of why the device of claim 1, comprised of the faces, would be electrically conductive.

With respect to the recitation "said faces being electrically conductive", in an effort to assist the Examiner's understanding, Applicant references Fig. 1 as an illustrative non-limiting example. Claim 1 requires that each face (front face 4, side plates 12, top plate 13, bottom plate 14, and back face 19) be electrically conductive. Indeed, Applicant's specification discloses that elements (faces) 12, 13, 14 and 19 are electrically conductive (*i.e.* conductors), and as a result of being assembled together, are electrically connected together. *See, e.g.*, Applicant's page 8, lines 1-3. Thus, with respect to the claimed device, Applicant's specification clearly indicates that the electrical continuity between the various surfaces of the claimed invention form a volume V that is electromagnetically isolated. *See, e.g.*, Applicant's page 9, lines 2-4 and Fig. 4.

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Additionally, Applicant's specification recognizes that a "gap" could pose a potential site of "electromagnetic leakage." *See, e.g.*, Applicant's page 6, lines 34-37.

A rejection under 35 U.S.C. § 112, second paragraph, requires a claim to clearly define the metes and bounds of the claimed invention. For at least the above exemplary reasons, the language of claims 1-11 is clear and definite, and Applicant traverses the grounds of rejection under 35 U.S.C. § 112, second paragraph.

### **III. Rejections under 35 U.S.C. § 102**

Claim 1 stands rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Aziz.

#### *A. Claim 1*

Aziz is directed to an improved electronic unit that seeks to avoid or minimize the disadvantages of other units, including the large amount of occupied space, the restricted accessibility to internal components, and the awkward placement/disposition of cables and/or conductors therein. *See* col. 1 of Aziz. Aziz, however, is silent as to electromagnetically protecting a drawer equipped with electronics cards, as recited in claim 1. Therefore, not surprisingly, Aziz fails to disclose all of the recitations recited in independent claim 1.

Thus, for example and not by way of limitation, assuming *ad arguendo* that the Examiner's characterizations of the unit 10 (*see* Fig. 1 of Aziz) as a device for receiving and protecting a drawer and the carrier 20 (*see* Fig. 1 of Aziz) as a drawer are accurate, Aziz nevertheless fails to disclose that one of the faces of the device is formed by the front face of a

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drawer, as recited in claim 1. To the contrary, Aziz discloses a front cover 24 that is located in front of the two carriers (drawers) and that is connected to a housing 12 surrounding the carriers. *See, e.g.*, Fig. 1 and col. 4, line 67 to col. 5, line 7 of Aziz. The Examiner makes a general reference to Fig. 2 of Aziz as disclosing this recitation. However, Fig. 2 clearly shows the aforementioned front cover 24. Thus, Aziz discloses a front cover (face) belonging to the housing 12 and not the drawer 20.

Furthermore, Aziz fails to disclose that the six faces of the device are electrically conductive, as recited in claim 1. To the contrary, Aziz discloses that the aforementioned front cover (face) is plastic. *See, e.g.*, col. 4, line 67 to col. 5, line 3 of Aziz. Thus, Aziz discloses a front cover (face) that is non-conductive.

For at least the above exemplary reasons, Applicant respectfully traverses the grounds of rejection under § 102(b) of claim 1.

#### **IV. Rejections under 35 U.S.C. § 103**

##### **1. Claims 2-3 and 9**

Claims 2-3 and 9 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Aziz in view of Anderson. However, the aforementioned deficiencies of Aziz (*see supra* section III.) are not remedied by the combination of Aziz in view of Anderson.

*Claim 2*

While the Examiner acknowledges that Aziz fails to teach or suggest a resilient electrical connection means for providing electrical connection between the front face of the drawer and the drawer-receiving structure, as recited in claim 2, the Examiner asserts that Anderson discloses a device comprising the resilient electrical connection means. The Examiner asserts that the damping devices 405/600 disclose this connection means. *See* Figs. 4 and 5; col. 3, line 65 of Anderson.

Anderson teaches that these damping devices 405/600 engage the top and bottom walls to provide for the damping of vibrations in the carrier and prevent vibrations in the chassis from transmitting to the carrier. *See, e.g.*, col. 4, lines 19-22 of Anderson. Anderson discloses that the damping devices 405/600 exert a static force of about six pounds while in the cabinet. *See, e.g.*, col. 4, lines 22-24 of Anderson. However, Anderson fails to teach or suggest that these damping devices provide an electrical connection between the front face of the drawer and the drawer-receiving structure, as recited in claim 2.

Indeed, the Examiner relies on col. 4, line 33 of Anderson in asserting that damping devices 405/600 provide an electrical connection because they can be made of metal. However, the Examiner appears to be mischaracterizing Anderson. Anderson describes a damping device 405/600 as generally consisting of a top element 601, a bottom element 603, and a viscoelastic element 605. *See, e.g.*, Fig. 6 of Anderson. Anderson indicates that the top element 601 and the bottom element 603 may be formed from metal. *See, e.g.*, col. 4, lines 31-34 of Anderson.

However, Anderson also indicates that the top element 601 and the bottom element 603 may be formed from plastic. *See, e.g.*, col. 4, lines 31-34 of Anderson. Thus, the conductivity of the top element 601 and the bottom element 603 is not a consideration in Anderson. This is not surprising given that, as discussed above, the damping devices 405/600 serve to prevent vibrations in the chassis from transmitting to the carrier. *See, e.g.*, col. 4, lines 19-22 of Anderson.

Additionally, the damping devices 405/600 of Anderson include a viscoelastic element 605 between the top element 601 and the bottom element 603. *See, e.g.*, Fig. 6 of Anderson. There is no teaching or suggestion in Anderson that this viscoelastic element is electrically conductive. Thus, since there is no teaching or suggestion that the top element 601 and the bottom element 603 are electrically connected, it follows that there is no teaching or suggestion that the damping devices 405/600 constitute "a resilient electrical connection means for providing electrical connection between the front face of the drawer and the drawer-receiving structure", as recited in claim 2.

Furthermore, because the objective of the Anderson invention is to provide a device for a common carrier to absorb vibration transmissions from a disk drive file to other co-located disk drive files and to minimize self-induced vibration problems (*see, e.g.*, col. 2, lines 7-10 of Anderson), and because this objective is met by the non-electrically conductive damping devices of Anderson, the Examiner appears to be employing impermissible hindsight to read a recitation of Applicant's invention into Anderson.

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As the Federal Circuit just recently reminded us, the USPTO is held to a *rigorous* standard when trying to show that an invention would have been obvious in view of the combination of two or more references. *See, In re Sang Su Lee*, 2002 U.S. App. LEXIS 855, \*10 (Fed. Cir. 2002), *citing, e.g., In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (“Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.”).

The Federal Circuit goes on to emphasize that the “need for specificity pervades this authority.” *In re Sang Su Lee* at \*10-\*11 (emphasis added) (*citing In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) (“particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed”)).

Applicants respectfully submit that the current grounds of rejection do not satisfy the Federal Circuit’s *rigorous* standard for demonstrating that the claimed invention would have been obvious in view of the combination of Aziz in view of Anderson.

Additionally, even assuming *ad arguendo* that Anderson does disclose a device comprising resilient electrical connection means, the Examiner's conclusory statement that it would have been obvious to one having ordinary skill in the art at the time the invention was made to use the resilient electrical means taught by Anderson to employ in the device of Aziz in order to reduce vibration transmitted when a module is inserted into a chassis of the device does

not make sense. Aziz is directed to an improved electronic unit that seeks to avoid or minimize the disadvantages of other units, including the large amount of occupied space, the restricted accessibility to internal components, and the awkward placement/disposition of cables and/or conductors therein. *See* col. 1 of Aziz. However, Anderson is directed to providing a device for absorbing vibration transmissions from a disk drive file to other co-located disk drive files and for minimizing self-induced vibration problems. *See, e.g.,* col. 1, line 6, col. 2, line 10 of Anderson. Thus, an incongruity arises (which is further evidence of an impermissible hindsight analysis on the part of the Examiner) in attempting to combine the teachings of Anderson, which is directed to a vibration problem relating to disk drives (*e.g.,* caused by the rotational energy of a hard disk drive actuator), with the improved electronic unit of Aziz, which indicates no vibration problem.

For at least the above reasons, Applicant submits that the Examiner failed to establish a *prima facie* case of obviousness by demonstrating some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Additionally, even assuming *ad arguendo* that a valid suggestion or motivation exists for combining the references, the combination of Aziz in view of Anderson still fails to teach or suggest the various features of the claimed invention, as discussed above.



*Claim 3*

Dependent claim 3 is patentable over the combination of Aziz in view of Anderson at least by virtue of its dependency from claim 2 and the additional limitations recited therein. For example, and not by way of limitation, the combination fails to teach or suggest that the resilient electrical connection means is formed by electrically-conductive springs, as recited in claim 3. The Examiner merely cites to Figs. 4 and 5 of Anderson as illustrating the aforementioned damping means 405/600. Anderson does disclose that a damping device may include two stainless steel springs. *See* col. 6, lines 37-39 of Anderson. However, Anderson also discloses that the springs are laminated together with a viscoelastic material which, as discussed above, certainly removes any ability to assume an electrically-conductive ability of the springs. *See, e.g.,* col. 6, lines 37-39 of Anderson.

Also, as discussed above for claim 2, no proper motivation to combine the teachings of Aziz and Anderson exists.

*Claim 9*

Claim 9 is patentable over the combination of Aziz in view of Anderson because the combination fails to teach or suggest that drawer-receiving recesses for two adjacent drawers are separated by an intermediate electrically-conductive plate suitable for creating electromagnetic isolation between the two recesses, as recited in claim 9. The Examiner cites to Fig. 1 as showing an intermediate plate that separates the two modules. *See* Fig. 1 of Anderson.

However, Anderson fails to teach or suggest that these bay-forming walls are electrically conductive as required by claim 9.

Furthermore, Anderson fails to teach or suggest that these bay-forming walls are suitable for creating electromagnetic isolation. For example, the walls clearly have openings. *See* Fig. 1 of Anderson. However, Anderson fails to address the relationship between these openings and the electromagnetic waves from which isolation is required.

For at least these reasons, Anderson fails to teach or suggest an intermediate electrically-conductive plate suitable for creating electromagnetic isolation between two recesses, as recited in claim 9.

Also, as discussed above for claim 2, no proper motivation to combine the teachings of Aziz and Anderson exists.

## 2. Claims 4-8 and 11

Claims 4-8 and 11 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Aziz in view of Porter. However, the aforementioned deficiencies of Aziz (*see supra* section III.) are not remedied by the combination of Aziz in view of Porter. Claims 4-8 and 11 are patentable over the combination of Aziz in view of Porter at least by virtue of their dependency and because of the additional recitations recited therein.

For example and not by way of limitation, the combination fails to teach or suggest that "said back face is a grating provided with openings for passing cables for connecting to said

connectors of said structure", as recited in claim 5. The Examiner acknowledges that Aziz fails to teach or suggest this feature of claim 5. However, the Examiner relies on Figs. 2 and 5 of Porter, in asserting that Porter makes up for this deficiency of Aziz. With respect to Figs. 2 and 5 of Porter, no openings are illustrated on the backplane 24 for passing cables through. While Fig. 5 of Porter illustrates electrical cables connected to feed-throughs 42 in the front panel, Porter expressly teaches away from having any openings in the panels in order to avoid the entry of dust, moisture, and other contaminants into the system. *See, e.g.*, col. 10, lines 13-21 of Porter. Indeed, Porter describes a container for enclosing electronic modules/equipment for use in harsh military and commercial environments, wherein any openings would likely degrade the ability of the container to protect its contents within the aforementioned harsh environments. *See, e.g.*, Abstract of Porter.

Furthermore, the combination fails to teach or suggest that the sum of the areas of the openings in each of the top and bottom faces is approximately equal to the area through which air can pass vertically in said drawer, as recited in claim 7. The Examiner relies on Fig. 2 of Porter as allegedly disclosing this limitation. Porter does disclose ventilated top and bottom panels. *See, e.g.*, Fig. 2; col. 10, lines 53-56 of Porter. However, Porter fails to teach or suggest the relationship between the sums of the openings and the area through which air can pass vertically in the drawer, as recited in claim 7.

Even further, the combination fails to teach or suggest that a maximum linear dimension of said openings is considerably smaller than a minimum wavelength of electromagnetic waves

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from which said drawer is to be isolated, as recited in claim 8. The Examiner acknowledges that the combination fails to teach or suggest this recitation, but alleges it would have been obvious to employ openings of a size compared with the wavelength of the electromagnetic waves since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *Citing In re Boesch and Slaney*, 205 U.S.P.Q. 215 (C.C.P.A. 1980). Unlike the claimed invention of *In re Boesch*, which overlapped ranges disclosed by the prior art, the Examiner makes no showing that the structure recited in Applicant's claim 8 wherein the maximum linear dimension of the openings is considerably smaller than a minimum wavelength of electromagnetic waves from which the drawer is to be isolated is taught or suggested by the prior art. Thus, the Examiner failed to establish a *prima facie* case of obviousness for claim 8. *See* MPEP § 2143.

For at least the above reasons, Applicant traverses the rejections of claims 2-9 and 11 under 35 U.S.C. § 103(a).

#### **V. Allowable Subject Matter**

The Examiner for acknowledges that claim 10 contains allowable subject matter. The Examiner indicates that claim 10 would be allowed if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, in view of the above arguments, Applicant believes that claim 10 is allowable in its present dependent form.

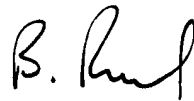
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## **VI. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned attorney at the telephone number listed below.

Applicant hereby petitions for any extension of time which may be required to maintain the pendency of this case, and any required fee, except for the Issue Fee, for such extension is to be charged to Deposit Account No. 19-4880.

Respectfully submitted,



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